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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,177	09/27/2004	Akinori Koukitsu	121213	5228

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EXAMINER

SONG, MATTHEW J

ART UNIT	PAPER NUMBER
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1722

MAIL DATE	DELIVERY MODE
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08/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/509,177	Applicant(s) KOUKITSU ET AL.	
	Examiner Matthew J. Song	Art Unit 1722	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 16 August 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-18.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

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Continuation of 3. NOTE: Claim 1 has been amended to further require a reaction chamber made only of quartz and the first step occurs in a first reaction zone and a second step occurs in a second reaction zone. The new limitations would require further search and consideration.

Continuation of 11. does NOT place the application in condition for allowance because: the arguments are directed to the amendment, which was not entered regarding claims 1-6.

Regarding claims 7-18, the arguments are not persuasive.

Applicant's arguments regarding Shibata are noted but are not found persuasive.

Applicant alleges that the reactor taught by Shibata cannot prevent the corrosion of the inner reactor. This is not persuasive because Shibata teaches a reactor with two zones of heating, which are capable of heating a first zone to 700°C or below and a second zone to a 700 to 1300°C, thus would be capable of the claimed intended use. Applicant also alleges that the double structure reactor taught by Shibata does not meet the claimed single wall reaction chamber made only of quartz. This argument is not persuasive because the inner reactor taught by Shibata is a single walled reactor made only of quartz, thus meets the claimed limitations. The outer reactor is an additional reactor, however the inner reactor by itself meets the instantly claimed invention. In other words, the inner reactor is a single walled reactor and the outer reactor is a separate and independent single wall reactor, thus the inner reactor is the single wall quartz reactor and the outer reactor is an additional single wall quartz reactor. It is noted that the rejection is based on Figure 4 of Shibata, thus the arguments regarding Figures 1-3 are not relevant. Finally, the only structural limitations are a single wall reaction chamber made only of quartz and two separately heated reaction zone. All of the structural limitations are disclosed by

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Shibata, thus the instantly claimed invention is anticipated. The fact that the reactor taught by Shibata may fail due to corrosion does not result in a patentable difference because there are no structural features claimed by applicant to differentiate Shibata from applicant's reactor.


In response to applicant's arguments, the recitation an apparatus for producing an Al-containing III-V group compound semiconductor has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant's arguments regarding Hong et al are noted but not found persuasive.

Applicant alleges Hong does not teach a single wall reaction chamber made only of quartz. Hong teaches a quartz reaction tube 14 (col 4, ln 25-40), this reads on applicant's single wall reaction tube made only of quartz. Applicant also alleges that the growth taught by Hong et al is not similar to producing an Al-containing III-V compound semiconductor. First, the limitation occurs in the preamble and is not given patentable weight. Second, the limitation is an intended use recitation and the apparatus taught by Hong et al is capable of producing an Al-containing III-V compound semiconductor. Applicant's argument that Hong et al does not teach an apparatus for producing an Al-containing III-V group compound semiconductor is noted but not found persuasive. Applicant's invention is directed to an apparatus and the only apparatus limitations are a single wall quartz reactor, a first heating zone and a second heating zone. Hong

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et al teaches all of the structural limitations and is capable of the claimed intended use, thus anticipates applicant's invention.


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